

EXHIBIT 2

Determination of Surface Electrostatic Charge on Nasal Application Test Products
Test Conducted and Report Prepared by Alexei Ermakov; Ph. D. (Physics), Sr. Consultant

I. TEST OBJECTIVE

The purpose of this test was to determine the magnitude (amount) of the surface electrostatic charge created by means of application of solution, serum, and spray containing permanently ionized molecules.

II. APPARATUS SETUP

The apparatus used in this electrostatic charge measurement of three nasal products comprised of a metal box containing a test sample spinner and a sensing electrode, which was connected to a Keithley Instruments 823 nano-volt amplifier (Figure 1).

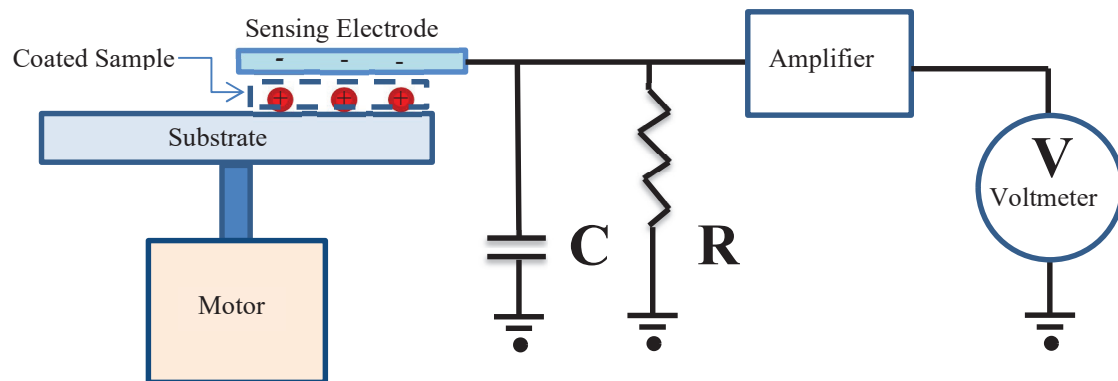


Figure 1
(Not to scale)

In Figure 1, C and R indicate the capacitance and resistance of the input circuitry of the amplifier respectively. Input capacitance was measured to be 80 pF and input resistance was 50 MΩ.

The spinner box and the sensing electrode apparatus are shown in Figure 2.

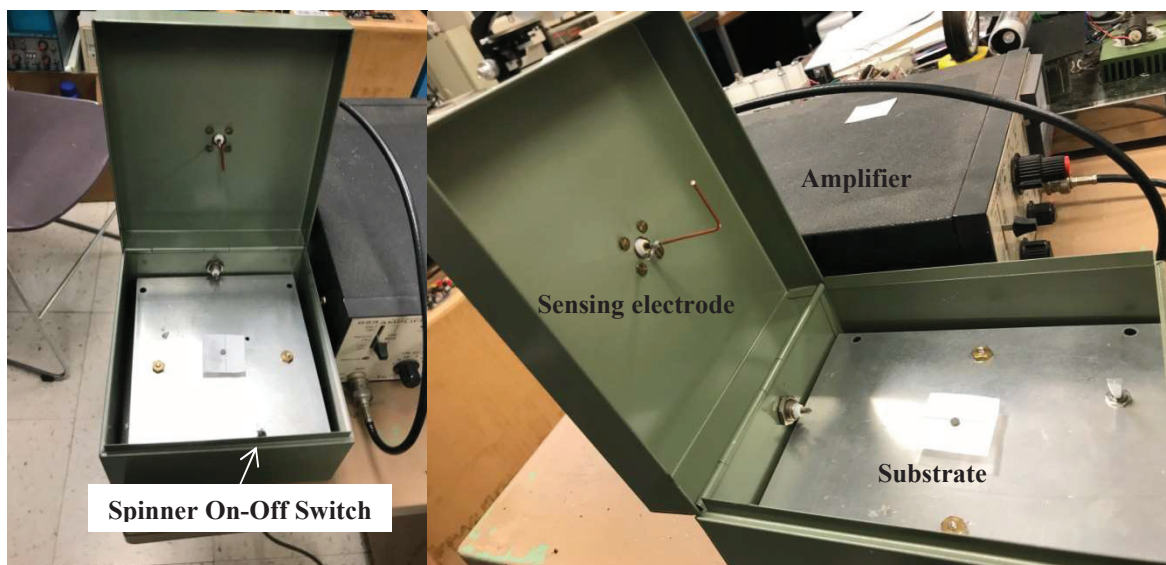


Figure 2

The sensing electrode is made of 1.3 mm diameter copper wire. When the metal box top is in the closed position, the sensing electrode is about 1.5 mm above the sample surface.

III. METHOD

Using the above mentioned apparatus, the amount of surface charge can be determined by means of measurement of induced image charges in the sensing electrode. The polarity of charge, i.e. cationic or anionic, was not the objective of this test measurement.

For each of the three nasal test products, a plain sheet of identical printer paper was used as a substrate. Each of these samples was prepared by coating the test product on 1-inch square substrate by a product under test. Three samples for each item/product were tested identically, an average calculated and recorded. Four items tested are shown in the Figure 3 below:

Product Test Samples:

1. Blank / Uncoated Substrate
2. TTK-APB / NasalGuard Airborne Particle Blocker (Gel)
3. TTK-NS / NasalGuard Misting Spray (Nasal Spray)
4. BW-NBP / Blue Willow NanoBio Protect (Solution for applications by a swab)

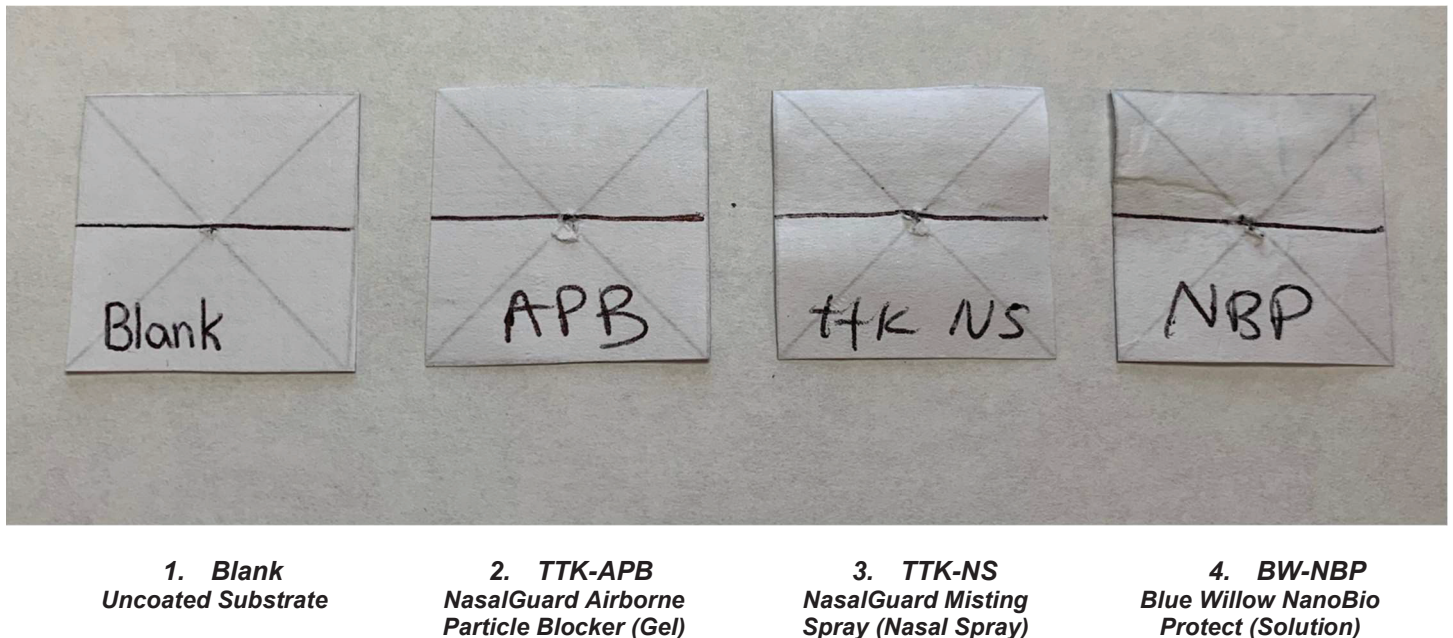


Figure 3 – Samples which were used in test conducted on December 22, 2020

Forceps were used every time each sample was placed onto and removed from the spinner. Each sample was carefully placed onto the spinner and the motor was switched 'On'. The metal box is then closed in order for the spinning sample to be within close distance (1.5 mm) below the copper sensing electrode.

During the sample spinning, treated and untreated surface repeatedly moved under the sensing electrode and the induced image creates an AC electrical current in the circuitry connected to the sensing electrode of the apparatus. The induced current is measured and is proportional to the surface electrostatic charge.

IV. TEST RESULTS

The surface charge was calculated using the following formula:

$$Q=V*C/A$$

Where Q is charge per unit area, V is measured voltage on the sensing electrode, C is capacitance and A is the area of the sample under the sensing electrode.

The measured surface charges for the tested products are:

Product / Trade Name	V Output (*) Volts	Amp Gain	V Electrode Volts	Charge Coulomb/in. sq. +/- (*)
Blank (Uncoated Substrate) Avg.	0.7 +/- 0.10	100,000	7.0E-06	7.0E-15 +/- 3.0E-16
	0.7 +/- 0.10	100,000	7.0E-06	7.0E-15 +/- 3.0E-16
	0.6 +/- 0.10	100,000	6.0E-06	6.0E-15 +/- 3.0E-16
	0.7 +/- 0.10	100,000	7.0E-06	6.67E-15 +/- 3.0E-16
NasalGuard Airborne Particle Blocker (Gel) TTK-APB Avg.	1.1 +/- 0.10	10,000	1.1E-04	8.80E-14 +/- 3.0E-15
	0.72 +/- 0.10	10,000	7.2E-05	5.76E-14 +/- 3.0E-15
	1.3 +/- 0.10	10,000	1.3E-04	1.04E-13 +/- 3.0E-15
	1.04 +/- 0.10	10,000	1.0E-04	8.32E-14 +/- 3.0E-15
NasalGuard Misting Spray (Nasal Spray) TTK-NS Avg.	1.12 +/- 0.10	10,000	1.12E-04	8.96E-14 +/- 3.0E-15
	0.9 +/- 0.10	10,000	9.0E-05	7.20E-14 +/- 3.0E-15
	0.675 +/- 0.10	10,000	6.75E-05	5.40E-14 +/- 3.0E-15
	0.90 +/- 0.10	10,000	9.0E-05	7.19E-14 +/- 3.0E-15
Blue Willow NanoBio Protect (Solution) BW-NBP Avg.	0.07 +/- 0.10	10,000	7.0E-05	5.60E-14 +/- 3.0E-15
	0.58 +/- 0.10	10,000	5.8E-05	4.64E-14 +/- 3.0E-15
	0.35 +/- 0.10	10,000	3.5E-05	2.80E-14 +/- 3.0E-15
	0.54 +/- 0.10	10,000	5.4E-05	4.35E-14 +/- 3.0E-15

(*) Indicates the approximate uncertainty of the value indicated in the column.

V. CONCLUSION

- 1) The test products i.e., Blank, NasalGuard Airborne Particle Blocker Gel, NasalGuard Misting Spray, and NanoBio Protect Solution, all demonstrated the presence of a surface electrostatic charge.
- 2) The surface electrostatic charge measured was determined to be approximately (in order of magnitude) similar in all three product samples tested.

Signatures:



(Alexei Ermakov)